



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,082	03/16/2001	Hongli Willimann	1775	2277
35157	7590	10/24/2003	EXAMINER	
NATIONAL STARCH AND CHEMICAL COMPANY P.O. BOX 6500 BRIDGEWATER, NJ 08807-3300			EGWIM, KELECHI CHIDI	
			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 10/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

12

Office Action Summary	Application No.	Applicant(s)	
	09/744,082	WILLIMANN ET AL.	
	Examiner	Art Unit	
	Dr. Kelechi C. Egwim	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 30 September 2003.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 48-66 is/are pending in the application.

4a) Of the above claim(s) 63 and 64 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 48-62, 65 and 66 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.

4) Interview Summary (PTO-413) Paper No(s). _____.

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/8/03 has been entered.

Election/Restrictions

2. Newly submitted claims 63 and 64 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: These claims as drawn to a combination comprising the claimed redispersible polymer as a subcombination and the search required for the combination is not required for the originally claimed redispersible polymer.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 63 and 64 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 48, 50, 51, 53-58, 60-62, 65 and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by Maslanka et al.

In col. 2, Maslanka et al. teach

a) forming a polymer from a monomer mixture comprising cationic quaternary salt monomers (reactive emulsifying agent); and

b) adding additional monomer and further polymerizing the mixture to obtain a heterogeneous (core-shell) polymer, wherein the polymer is preferable prepared without any additional dispersant/stabilizer (col. 4, lines 24-27).

In col. 9, lines 44-55, Maslanka et al. teach that the latex is subsequently dried and has particle sizes between 0.1 to about 2 microns (100 to about 2000 nm).

Thus, the requirements for rejection under 35 U.S.C. 102(b) are met.

Regarding claim 62, while the cited reference may not specify the mode of drying the latexes, the dried latexes are still the same as the presently claimed dried latexes and the products are still anticipated. See *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983) and *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985). See also MPEP § 2113.

5. Claims 48-58, 60-62, 65 and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by Katayama et al.

In col. 2, lines 20-48, Katayama et al. teach a particulate (finely divided) polymer prepared by

a) forming a polymer from a monomer mixture comprising 0.1 to 30 parts by weight, based 100 parts by weight of the polymer, of cationic quaternary salt monomers (reactive emulsifying agent)(col. 24, lines 23-58); and

b) adding additional monomer and further polymerizing the mixture to obtain a heterogeneous (core-shell) polymer, wherein the particle sizes of the final polymers are less than 500 nm (col. 25, lines 40-43) and the particles are dried prior to application,

wherein the polymer is preferable prepared without any additional dispersant/stabilizer (col. 3, lines 30-33).

Thus, the requirements for rejection under 35 U.S.C. 102(b) are met.

6. Claims 48, 53-62, 65 and 66 are rejected under 35 U.S.C. 102(e) as being anticipated by Inoue (USPN 6,011,103) or under 35 U.S.C. 102(a) as being anticipated by Inoue (WO 97/31045). US 6,011,103 is the English translation to WO 97/31045.

In col. 1, line 66 to col. 2, line 36 of US', Inoue teaches a fine granular polymer prepared by forming an aqueous emulsion polymer from a monomer mixture comprising 7.5 to 70 % of cationic quaternary salt monomers and additional monomers (col. 4, lines 11-10 of US') including anionic monomers (col. 4, lines 62-65 of US'), wherein no additional emulsifier needs to be added, and the fine grains are obtained by removing water from the dispersion (col. 15, lines 56-59 of US').

Thus, the requirements for rejection under 35 U.S.C. 102(a or e) are met.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kelechi C. Egwim whose telephone number is (703) 306-5701. The examiner can normally be reached on M-T (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703) 308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

KELECHI C. EGWIM PH.D.
PRIMARY EXAMINER

KCE

